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## (54) FACE ANNOTATION FOR PHOTO MANAGEMENT

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See application file for complete search history.

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#### ABSTRACT (57)

Systems and methods for annotating a face in a digital image are described. In one aspect, a probability model is trained by mapping one or more sets of sample facial features to corresponding names of individuals. A face from an input data set of at least one the digital image is then detected. Facial features are then automatically extracted from the detected face. A similarity measure is them modeled as a posterior probability that the facial features match a particular set of features identified in the probability model. The similarity measure is statistically learned. A name is then inferred as a function of the similarity measure. The face is then annotated with the name.

## 36 Claims, 6 Drawing Sheets

